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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,942	04/15/2004	Mitsuhiko Otani	10873.1453US01	7557

53148 7590 10/30/2007

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EXAMINER	
KARIMY, MOHAMMAD TIMOR	
ART UNIT	PAPER NUMBER
2815	
MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary	Application No.	Applicant(s)	
	10/824,942	OTANI, MITSUHIKO	
	Examiner	Art Unit	
	Mohammad Timor Karimy	2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 & 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 recite the limitation "so as to be capable of supplying a collector current of a parasitic transistor formed with the semiconductor substrate with a base and well regions of the digital and analog circuit parts as an emitter and a collector". The language used is not clear as to what is formed with a base and well regions of the digital and analog circuit parts.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. In view of the 112 rejection above, claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ishikura et al. (US Pub 2002/0079556 A1).

Ishikura discloses in figure 5B, a semiconductor integrated circuit device, comprising a digital circuit 51 and an analog circuit 50 that are disposed on a surface of a semiconductor substrate 52.

wherein a dummy layer part 13a made of polysilicon that is the same as polysilicon composing a gate of a transistor is disposed directly on a portion of the semiconductor substrate being of higher resistance than a well region between the digital circuit 51 and the analog circuit 50 (Ishikura explicitly teaches in paragraphs [16-17] that P-type region 52 has increased resistance due to analog and digital regions being sufficiently spaced away from one another (note that region 52 is under the dummy gate layers 13a)), and

a dummy diffused region is provided between an area under the dummy layer part and one of the digital circuit part and the analog circuit part, with a power-supply potential being applied to the dummy diffused region (see figure 5B below).

It has been held that the recitation that an element is "**capable of supplying**... as an emitter and a collector respectively" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Furthermore, note that Ishikura's device presents a structure that reads on applicant's claim as discussed above, and as such a parasitic transistor may exist in Ishikura's device between a collector and an emitter as well (see illustrations on figure 5B below).

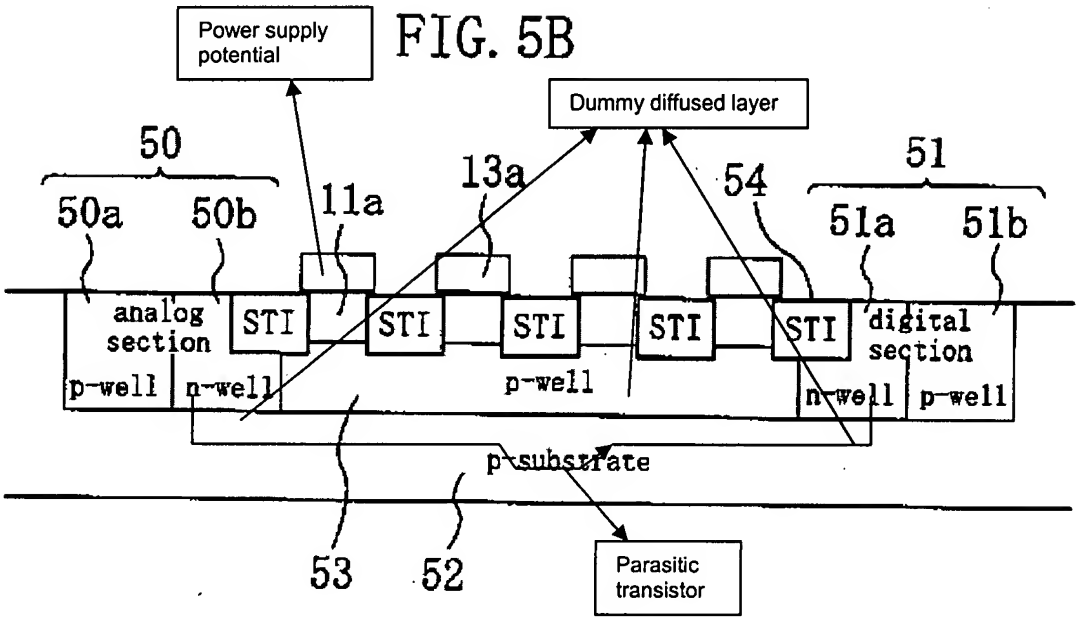

FIG. 5B

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art admitted by Hasegawa (US Patent 5,900,927) in view of Ishikura et al. (US pub 2002/0079556 A1).

With respect to claim 5, the recitation "camera" in line 1 has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

With respect to the additional limitations of claim 5, the prior art admitted by Hasegawa teaches in column 1 lines 31-66 and column 2 lines 1-4, an imaging element and a semiconductor integrated circuit device comprising a digital circuit for driving an imaging element 205 and an analog circuit for processing an image detecting signal that is outputted from the imaging element 205 (see figures 34A and 34B). However, the prior art does not teach a dummy polysilicon region between the digital and analog circuits. Nonetheless, Ishikura teaches a dummy layer 13a part made of polysilicon that is the same as polysilicon composing a gate of a transistor between the digital circuit part and the analog circuit part. Ishikura further teaches a dummy diffused region (see Fig. 5B above) provided between an area under the dummy layer part and one of the digital circuit part and the analog circuit part, with a power supply potential being applied to the dummy diffused region. The admitted prior art by Hasegawa and Ishikura are analogous art, namely both deal with analog and digital circuits of image sensor devices. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to form a dummy region between the digital and analog circuits as taught

by Ishikura in order to suppress noise propagation. The motivation for doing so would have been to reduce noise. Therefore, it would have been obvious to combine Hasegawa's admitted prior art and Ishikura for the benefit of suppressing noise propagation.

Additionally, It has been held that the recitation that an element is "**capable of supplying**... as an emitter and a collector respectively" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Furthermore, note that Ishikura's device presents a structure that reads on applicant's claim as discussed above, and as such a parasitic transistor may exist in Ishikura's device between a collector and an emitter as well (see illustrations on figure 5B above).

Response to Arguments

7. Applicant's arguments filed 01/10/2007 have been fully considered but they are not persuasive.

With respect to claims 1 and 5, applicant's argument is not persuasive for the added limitation "so as to be **capable of supplying**... respectively" contains intended use language. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987). Moreover, it has been held that the

recitation that an element is "**capable of supplying**... as an emitter and a collector respectively" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

In light of the above, applicant's argument is not persuasive.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Timor Karimy whose telephone number is 571-272-9006. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mtk

EUGENE LEE
PRIMARY EXAMINER